

REMARKS

Claims 1, 2, 4-11, and 13-28 are currently pending in the present application, with Claims 3 and 12 being canceled, and Claims 1, 6, 10, 15, 19, 24, and 28 being amended. Reconsideration and reexamination of the claims are respectfully requested.

The Examiner rejected Claims 1-3, 4-12, 14-21, and 23-28 under 35 U.S.C. § 102(b) as being anticipated by Murakami (U.S. Patent No. 5,523,525). This rejection is moot with respect to canceled Claims 3 and 12 and respectfully traversed with the remainder amended claims.

The present invention is directed to a method and apparatus for efficiently communicating MIDI data and audio data through various kinds of communication network. More specifically, a transfer rate is first estimated in accordance with a communication rate of a communication network, and the audio data is then transmitted along with data amount information in a controlled fashion such that the rate of transfer is based on the estimated transfer rate of the communication network, the media data such as MDI data, and the data amount information indicating amount of data to be transmitted. A receiver then receives the controlled audio data and reproduces the received audio data in accordance with the data amount information received.

Murakami, in contrast, is directed to a device for synchronizing musical performance data with video display data, such as synchronizing data outputted from an electronic musical instrument (e.g., an electronic piano) and a video display device (e.g., a television display). More specifically, Murakami discloses a performance recording and playback apparatus that transmit each bit of performance data, such as MIDI data, in correspondence with a half wavelength of a carrier wave, and reproduces as well as records the MIDI data in synchronization with video data. Murakami does not contain any disclosure or suggestion of estimating a transfer rate of data in accordance with the communication rate of a communication network, and simply does not teach or suggest controlling the rate of digital audio data transfer in accordance with the estimate communication rate, the non-digital audio data to be transferred, and the amount of data to be transferred. (as recited in amended Claims 1, 10, 19, and 28).

Applicant has repeatedly reviewed the Abstract and Figures 1, 2, and 8 of Murakami, cited by the Examiner, and cannot find any disclosure of estimating data transfer rate of a communication network. Furthermore, Murakami does not contain any disclosure or suggestion of transferring data amount information and using such information on the receiving end to reconstruct and reproduce digital audio data. (as recited in amended Claims 6, 15, and 24). Accordingly, Applicant respectfully submits that Claims 1, 2, 4-11, 14-21, and 23-28 are not anticipated by, nor obvious in view of, Murakami.

The Examiner rejected Claims 4, 13, and 22 under 35 U.S.C. § 103(a) as being unpatentable over Murakami. This rejection is respectfully traversed with respect to the amended claims.

As discussed above, Murakami does not contain disclosure or suggestions of all the elements of independent Claims 1, 10, and 19. Accordingly, Applicant respectfully submits that respective dependent Claims 4, 13, and 22 are also not anticipated by Murakami.

In view of the foregoing, Applicant respectfully submits that all of the pending claims are in condition for allowance. Reconsideration and reexamination of the claims are respectfully requested, and an early allowance is solicited. If the Examiner believes it would further advance the prosecution of the present application, she is respectfully requested to contact the undersigned attorney.

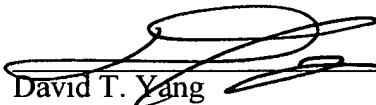
Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made".

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, Applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. 393032006700.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claims 1, 6, 10, 15, 19, 24, and 28 have been amended in the following manner:

1. (Amended) A communication device comprising:

[an] a transfer rate estimator which estimates transfer rate of media data other than digital audio data before transmission in accordance with a communication rate of a communication network;

a data amount controller which controls the amount of the digital audio data to be transmitted in accordance with the transfer rate estimated by said transfer rate estimator; and

a transmitter which transmits the audio data whose data amount is controlled by said data amount controller [and], the media data other than the audio data, and data amount information indicating data amount of the audio data controlled by said data amount controller.

6. (Amended) A communication device comprising:

a receiver which receives audio data and data amount information indicating [whether] data amount of the audio data [is] that has been controlled;

a data amount restorer which restores the controlled data amount of the audio data to original data amount with [references] reference to the data amount information; and

a reproduction indicator which indicates reproduction of the audio data whose data amount is restored by said data amount restorer.

10. (Amended) A communication method comprising the steps of:

(a) estimating transfer rate of media data other than digital audio data before transmission in accordance with a communication rate of a communication network;

(b) controlling data amount of the digital audio data to be transmitted in accordance with the estimated transfer rate; and

(c) transmitting the audio data whose data amount is controlled by said step (b), [and] the media data other than the audio data, and data amount information indicating data amount of the audio data controlled by said step (b).

15. (Amended) A communication method comprising the steps of:

(a) receiving audio data and data amount information indicating [whether] data amount of the audio data [is] that has been controlled;

(b) restoring the controlled data amount of the audio data to original data amount with reference to the data amount information; and

(c) indicating reproduction of the audio data whose data amount is restored by said step (b).

19. (Amended) A recording medium storing a program which causes a computer to execute the steps of:

(a) estimating transfer rate of media data other than digital audio data before transmission in accordance with a communication rate of a communication network;

(b) controlling data amount of the digital audio data to be transmitted in accordance with the estimated transfer rate; and

(c) transmitting the audio data whose data amount is controlled by said step (b) [and], the media data other than the audio data, and data amount information indicating data amount of the audio data controlled by said step (b).

24. (Amended) A recording medium storing a program which causes a computer to execute the steps of:

- (a) receiving audio data and data amount information indicating [whether] data amount of the audio data that has been [changed] controlled;
- (b) restoring the data amount of the audio data to original data amount with reference to the data amount information; and
- (c) indicating reproduction of the audio data whose data amount is restored by said step (b).

28. (Amended) A communication device comprising:

transfer rate estimation means for estimating transfer rate of media data other than digital audio data before transmission in accordance with a communication rate of a communication network;

data amount controlling means for controlling data amount of the digital audio data to be transmitted in accordance with the transfer rate estimated by said transfer rate estimator; and

transmission means for transmitting the audio data whose data amount is controlled by said data amount controlling means [and], the media data other than the audio data, and data amount information indicating data amount of the audio data controlled by said data amount controlling means.